

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Amendments to the claims

Please amend the claims as follows.

1. (twice amended) A protein having the sequence of SEQUENCE [1] I.D. No. 1 wherein the amino acid residues at one or more of positions 5, [10,] 11, [12,] 17, 19, 22, 30 and 41 are lysine, and the remainder of the residues at those positions are the residues at the corresponding positions in SEQUENCE I.D. No. 1.
2. (twice amended) A protein according to claim 1, wherein one or more of the amino acid residues at positions 5, 11, [12,] 17, 19, 22 and 41 are lysine.
3. (twice amended) A protein according to claim 2, wherein all of the amino acid residues at positions 5, 11, 17, 19, 22 and 41 are lysine.
4. (once amended) A nucleotide sequence which codes for [a] the protein according to claim 1.
5. (once amended) An RNA sequence [according to claim 4] that encodes the protein of claim 1.
6. (once amended) A DNA sequence [according to claim 4] that encodes the protein of claim 1.
7. (original) An expression cassette containing the DNA sequence of claim 6 operably linked to plant regulatory sequences which cause the expression of the DNA sequence in plant cells.
8. (thrice amended) A bacterial transformation vector comprising [an] the expression cassette according to claim 7[,] operably linked to bacterial expression regulatory sequences which cause replication of the expression cassette in bacterial cells.
9. (once amended) Bacterial cells containing as foreign plasmid at least one copy of a bacterial transformation vector according to claim 8.
10. (original) Transformed plant cells containing at least one copy of the expression cassette of claim 7.
11. (once amended) [Transformed] The transformed cells according to claim 10, further characterized in being cells of a monocotyledonous species.
12. (once amended) [Transformed] The transformed cells according to claim 11, further characterized in being maize, sorghum, wheat or rice cells.

13. (once amended) [Transformed] The transformed cells according to claim 10, further characterized in being cells of a dicotyledonous species.
14. (once amended) [Transformed] The transformed cells according to claim 13, further characterized in being soybean, alfalfa, rapeseed, sunflower, tobacco or tomato cells.
15. (once amended) [A maize cell or tissue culture comprising] The transformed cells [according to claim 12] of claim 11 wherein the cells are maize cells.
16. (original) A transformed plant comprising transformed cells according to claim 10.
17. (twice amended) A method for killing and inhibiting plant pathogenic microorganisms which are susceptible to [a] α -Hordothionin [comprising] , wherein the method comprises introducing into the environment of the pathogenic microorganisms an antimicrobial amount of [a] the protein according to claim 1.
18. (once amended) A method for killing and inhibiting plant pathogens selected from the group consisting of: *Fusarium graminearum*, *Fusarium moniliforme*, *Diplodia maydis*, *Colletotrichum graminicola*, *Verticillium alboatrum*, *Phytophthora megaspermae* f.sp. *glycinea*, *Macrophomina phaseolina*, *Diaporthe phaseolorum caulivora*, *Sclerotinia sclerotiorum*, *Sclerotinia trifoliorum*, and *Aspergillus flavus*, [comprising] wherein the method comprises introducing into the environment of the pathogenic microorganisms an antimicrobial amount of [a] the protein according to claim 1.
19. (once amended) A method according to claim 17, wherein the environment of the pathogen is the tissues of a living plant.
20. (thrice amended) A method for enhancing the lysine content of a plant cell or seed [comprising the step of causing a] , wherein the method comprises transforming a plant cell by insertion of the expression cassette of claim 7 such that the protein according to claim 1 [to be] is expressed in the cell or seed.
21. (thrice amended) A method for enhancing the lysine content of a plant [comprising the step of causing a] , wherein the method comprises transforming a plant cell by insertion of the expression cassette of claim 7 such that the protein according to claim 1 [to be] is expressed in tissues of the plant.

STATUS OF THE CLAIMS AND SUPPORT FOR CLAIM CHANGES

Currently pending in the application are claims 1-21.

Support for the amendment to claims 1-3 to delete reference to residues 10 and 12 claims is provided in that the specification and claims provides for the residues to each one be separately substitute by lysine, and thus changing any one of these residues, independent of the other is provided. See for example column 3, lines 4-7 describing the invention as “wherein the amino acid residues at *one or more of* positions 5, 10, 11, 12, 17, 19, 22, 30 and 41 are lysine, and the remainder of the residues at those positions are the residues at the corresponding positions in SEQUENCE I.D. No. 1...”.

The amendments to claims 20 and 21 inserting language of transforming a plant cell is supported by the specification at column 4, line 9- column 7 line 27. The remaining amendments to the claims are to address grammatical and typographical issues, and to provide proper dependency of claims, adopting proposals by the Examiner.